

We claim:

1. A method for screening to identify a selective anxiolytic agent comprising  
contacting a candidate molecule with the  $\alpha$ 2-GABA<sub>A</sub> receptor and the  $\alpha$ 1-GABA<sub>A</sub> receptor  
5 and determining whether the candidate molecule selectively or preferentially binds to or  
activates the  $\alpha$ 2-GABA<sub>A</sub> receptor as compared to the  $\alpha$ 1-GABA<sub>A</sub> receptor, wherein a  
molecule that selectively or preferentially binds to or activates the  $\alpha$ 2-GABA<sub>A</sub> receptor as  
compared to the  $\alpha$ 1-GABA<sub>A</sub> receptor is a selective anxiolytic agent.

10 2. A method for screening to identify a selective anxiolytic agent comprising  
contacting a candidate molecule with the  $\alpha$ 2-GABA<sub>A</sub> receptor and the  $\alpha$ 3-GABA<sub>A</sub> receptor  
and determining whether the candidate molecule selectively or preferentially binds to or  
activates the  $\alpha$ 2-GABA<sub>A</sub> receptor as compared to the  $\alpha$ 3-GABA<sub>A</sub> receptor, wherein a  
molecule that selectively or preferentially binds to or activates the  $\alpha$ 2-GABA<sub>A</sub> receptor as  
15 compared to the  $\alpha$ 3-GABA<sub>A</sub> receptor is a selective anxiolytic agent.

3. A method for screening to identify a selective anxiolytic agent comprising  
contacting a candidate molecule with the  $\alpha$ 2-GABA<sub>A</sub> receptor and the  $\alpha$ 5-GABA<sub>A</sub> receptor  
and determining whether the candidate molecule selectively or preferentially binds to or  
20 activates the  $\alpha$ 2-GABA<sub>A</sub> receptor as compared to the  $\alpha$ 5-GABA<sub>A</sub> receptor, wherein a  
molecule that selectively or preferentially binds to or activates the  $\alpha$ 2-GABA<sub>A</sub> receptor as  
compared to the  $\alpha$ 5-GABA<sub>A</sub> receptor is a selective anxiolytic agent.

4. A selective anxiolytic agent which selectively or preferentially binds to or  
25 activates the  $\alpha$ 2-GABA<sub>A</sub> receptor as compared to the  $\alpha$ 1-GABA<sub>A</sub> receptor.

5. A selective anxiolytic agent which selectively or preferentially binds to or  
activates the  $\alpha$ 2-GABA<sub>A</sub> receptor as compared to the  $\alpha$ 3-GABA<sub>A</sub> receptor.

30 6. A selective anxiolytic agent which selectively or preferentially binds to or  
activates the  $\alpha$ 2-GABA<sub>A</sub> receptor as compared to the  $\alpha$ 5-GABA<sub>A</sub> receptor.

7. The selective anxiolytic agent according to claim 4, 5 or 6, wherein the agent  
binds to the benzodiazepine binding site of the receptor.

8. The selective anxiolytic agent according to claim 4, 5 or 6, wherein the agent binds to the neurosteroid binding site of the receptor.

9. The selective anxiolytic agent according to claim 4, 5 or 6, wherein the agent binds to the barbiturate binding site of the receptor.

10. A method of treating an anxiety-related disorder comprising administering a therapeutically effective amount of a selective anxiolytic agent and a pharmaceutically acceptable carrier to a patient in need thereof.

11. The method according to claim 10 in which the selective anxiolytic agent is identified by the method of claim 1, 2 or 3.

12. The method according to claim 10 in which the selective anxiolytic agent binds to the benzodiazepine binding site of the receptor.

13. The method according to claim 10 in which the selective anxiolytic agent binds to the neurosteroid binding site of the receptor.

14. The method according to claim 10 in which the selective anxiolytic agent binds to the barbiturate binding site of the receptor.

15. The method according to claim 10 in which the selective anxiolytic agent is a pro-drug.

20. A method of identifying a molecule that decreases the ability of a non-selective benzodiazepine to bind to the  $\alpha 1$ -GABA<sub>A</sub> receptor but does not substantially decrease the ability of the non-selective benzodiazepine to bind to the  $\alpha 2$ -GABA<sub>A</sub> receptor comprising contacting the  $\alpha 1$ -GABA<sub>A</sub> receptor and the  $\alpha 2$ -GABA<sub>A</sub> receptor with a non-selective benzodiazepine and a candidate molecule and detecting the ability of the candidate molecule to decrease the ability of the benzodiazepine to bind to the  $\alpha 1$ -GABA<sub>A</sub> receptor but not substantially decrease the ability of the benzodiazepine to bind to the  $\alpha 2$ -GABA<sub>A</sub> receptor.

35. A method of identifying a molecule that decreases the ability of a non-selective benzodiazepine to bind to the  $\alpha 3$ -GABA<sub>A</sub> receptor but does not substantially decrease the

ability of the non-selective benzodiazepine to bind to the  $\alpha$ 2-GABA<sub>A</sub> receptor comprising  
contacting the  $\alpha$ 3-GABA<sub>A</sub> receptor and the  $\alpha$ 2-GABA<sub>A</sub> receptor with a non-selective  
benzodiazepine and a candidate molecule and detecting the ability of the candidate  
molecule to decrease the ability of the benzodiazepine to bind to the  $\alpha$ 3-GABA<sub>A</sub> receptor  
5 but not substantially decrease the ability of the benzodiazepine to bind to the  $\alpha$ 2-GABA<sub>A</sub>  
receptor.

18. A method of identifying a molecule that decreases the ability of a non-selective  
benzodiazepine to bind to the  $\alpha$ 5-GABA<sub>A</sub> receptor but does not substantially decrease the  
10 ability of the non-selective benzodiazepine to bind to the  $\alpha$ 2-GABA<sub>A</sub> receptor comprising  
contacting the  $\alpha$ 5-GABA<sub>A</sub> receptor and the  $\alpha$ 2-GABA<sub>A</sub> receptor with a non-selective  
benzodiazepine and a candidate molecule and detecting the ability of the candidate  
molecule to decrease the ability of the benzodiazepine to bind to the  $\alpha$ 5-GABA<sub>A</sub> receptor  
but not substantially decrease the ability of the benzodiazepine to bind to the  $\alpha$ 2-GABA<sub>A</sub>  
15 receptor.

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